

White River Trace Conservation Area

Ten-Year Area Management Plan FY 2016-2025





Wildlife Division Chief

2/5/16

Date

White River Trace Conservation Area Management Plan Approval Page

PLANNING TEAM

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OZARK REGION

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1-25-2016

Date

WILDLIFE DIVISION

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1/29/2016

Date

OVERVIEW

- **Official Area Name:** White River Trace Conservation Area, # 8917
- **Year of Initial Acquisition:** 1989
- **Acreage:** 2,044 acres
- **County:** Dent
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**

A. Strategic Direction

The primary purpose of the White River Trace Conservation Area (CA) is to provide an upland wildlife area with an emphasis on the management of bobwhite quail and other shrub/grassland wildlife on the Ozark Plateau; and to provide compatible public recreational opportunities.

B. Desired Future Condition

The desired future condition of the area is a grassland, woodland, and savanna complex.

C. Federal Aid Statement

N/A

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

- A. **Priority Areas:** Dry Fork Fisheries Priority Watershed, White River Trace Terrestrial Conservation Opportunity Area
- B. **Natural Areas:** None
- C. **Other:** Quail Emphasis Area

II. Important Natural Features and Resources

- A. **Species of Conservation Concern:** Species of conservation concern are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist.
- B. **Caves:** None
- C. **Springs:** None
- D. **Other:** Occurs in the Scarped Osage Plains Alluvial Plans Landtype Association. This landtype consists of flat alluvial plains and infrequent terraces of the broader stream valleys. Historically, bottomland prairie, marshes and bottomland forests dominated (Nigh & Schroeder, 2002).

III. Existing Infrastructure

- 7 parking lots (Americans with Disabilities Act (ADA) accessible, 1 gravel lot with concrete pad)
- 1 privy (ADA accessible)
- 1 campsite (no amenities)
- 1 7.27-acre fishing lake
- ~65 fishless ponds (total of ~8.2 acres)
- ~1.1 mile of the Osage Indian Trail (traverses southern portion of area)

IV. Area Restrictions or Limitations

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** None Recorded
- D. Cultural Resources Findings:** Yes, records kept with Missouri Department of Conservation (Department) Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** None observed.
- G. Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

White River Trace CA is comprised of grassland and woodland landscapes. These landscapes are managed to provide early successional habitat for upland species, particularly, bobwhite quail.

Challenges and Opportunities:

- 1) Manage for quality grassland and woodland communities, provide bare ground for grassland species and control exotic and invasive species.
- 2) Keep warm-season grass density at a level that is useable and beneficial for multiple species, particularly for bobwhite quail in breeding and brood-rearing months.

Management Objective 1: Manage grasslands throughout White River Trace CA in multiple successional stages to provide food and cover to multiple species, particularly bobwhite quail.

Strategy 1: Provide early successional habitat needed for bare ground and thicker nesting cover. Divide the area into multiple burn units. Conduct larger landscape burns on a minimum three-year rotation. (Wildlife)

Strategy 2: Favor grasses or forbs (depending on the limiting factor in each burn unit) by rotating burn frequency and season. (Wildlife)

Management Objective 2: Manage for quality woodland communities. Reduce the basal area (i.e., in units that have a more closed canopy) to enhance the native forb and warm-season grass understory. Allow timber to grow to larger size classes and uneven ages.

Strategy 1: Conduct prescribed burns on a three-year rotation to control leaf litter buildup and undesirable re-sprouting in areas where fire or mechanical techniques were previously used to reduce basal area. (Wildlife)

Strategy 2: Mechanically thin closed canopy woodlands if prescribed burns were previously ineffective. Subsequently, manage such areas as open woodlands, conducting prescribed burns on a three-year rotation. (Wildlife)

Management Objective 3: Manage natural communities while controlling or eliminating exotic or invasive species in grasslands and woodlands.

Strategy 1: Rotate prescribed burns later into the spring months, where tall fescue has been most detrimental to ground nesting birds. This will reduce the growth potential of tall fescue and favor warm-season grasses. This will also allow managers to effectively burn early in the fall and provide a higher growth potential for the tall fescue; and effectively spray with a cool-season grass-specific herbicide when tall fescue is more susceptible. (Wildlife)

Strategy 2: Seasonally spot-spray broadleaf-specific herbicides when it is most detrimental to exotic or invasive species (i.e., sericea lespedeza and spotted knapweed). (Wildlife)

Management Objective 4: Annually provide wildlife supplemental food plots and promote public use.

Strategy 1: Annually plant dove-friendly plots, including, but not limited to, sunflowers and wheat. These food plots will be managed to provide a food source to wildlife and a hunting opportunity for area users. (Wildlife)

Strategy 2: Plant multiple cereal grain food plots to provide food and cover for multiple species of wildlife, as well as hunting opportunities for the public. (Wildlife)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Manage fishing ponds to continue to provide close-to-home fishing opportunities.
- 2) Manage fishless ponds.
- 3) Minimize the downstream transport of sediments, gravel and pollutants.

Management Objective 1: Manage two ponds (on a 100-acre tract east of County Road 2540) for fishing.

Strategy 1: Periodically assess sport fish populations in all fishing ponds. Supplemental stocking and regulation changes will be utilized when appropriate for all fishing lakes and ponds. (Fisheries)

Strategy 2: Maintain the physical structure of the ponds. (Fisheries)

Strategy 3: Control aquatic vegetation to levels compatible with fishing. (Fisheries)

Strategy 4: Add fish cover as needed. (Fisheries)

Management Objective 2: Manage all other ponds on the areas as fishless (up to 65 ponds totaling up to 8.2 acres).

Strategy 1: Remove all fish from ponds if remnant population is found by staff. (Wildlife/Fisheries)

Strategy 2: Manage drainage area to the pond with minimal disturbance. (Wildlife)

Strategy 3: Add woody debris for turtles, frogs and salamanders if needed. (Wildlife)

Management Objective 3: Minimize the supply and transport of sediments, gravel or pollutants into downstream areas. Follow *Watershed and Stream Management Guidelines for Land and Waters Managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009).

Strategy 1: Minimize any adverse impacts to the watershed by observing protection measures during any disturbance in the riparian zones and around the pond. (Wildlife)

Strategy 2: Use appropriate herbicides when controlling invasive species in the riparian zones and around the ponds. Maintain the existing riparian corridor. (Wildlife)

Strategy 3: Consult Fisheries on all work inside the riparian corridors. (Wildlife)

Strategy 4: Control erosion along the road and trail system. (Wildlife)

Strategy 5: Improve road stream crossings on both county roads and service roads. Work toward the installation of crossings that minimize erosion from heavy equipment (e.g., Articulating Concrete Mat, riprap). (Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

Provide outdoor educational opportunities for the public.

Management Objective 1: Increase the awareness and success of habitat management on public lands and promote outdoor education.

Strategy 1: Work with the Outreach and Education Division to promote outdoor skills activities while working with the Discover Nature in Schools Program. (Wildlife)

Strategy 2: Continue to work with the Master Naturalist program annually while assisting with various programs including Missouri bird workshops. (Wildlife)

VIII. Administrative Considerations

Challenges and Opportunities:

Maintain Department boundary signs.

Management Objective 1: Keep current conservation area boundary signs visible and presentable to the public.

Strategy 1: Conduct an annual visual survey of all boundary signs. Replace damaged or missing signs. (Wildlife)

MANAGEMENT TIMETABLE

All strategies are considered ongoing.

APPENDICES

Area Background:

This 2,044-acre area, which was purchased in 1988, takes its name from an old Indian trail running across the southeast portion of the area.

Under the Indian Removal Act of 1830, the Cherokee were removed from their native lands in the southeastern United States and forcibly moved to Oklahoma. Peter Hilderbrand's detachment of 1,766 Cherokees separated from other groups in Crawford County and traveled through the White River Trace Area in March 1839. They later rejoined the main trail at Marshfield.

The White River Trace later became a major route for settlers traveling west. Nearby Mount Hermon Cemetery began with graves of these early travelers.

White River Trace consists of about 62 percent open ground of mainly native warm-season grasses and early successional plant types.

Management of the area has produced quality upland wildlife habitat, especially for bobwhite quail and other grassland bird species, such as grasshopper sparrows and dickcissels. This type of habitat is uncommon on the Ozark Plateau and the area provides a unique, recreational and wildlife viewing opportunity for this part of the state.

Before 1988, the property was used for a large beef cattle operation, resulting in little plant diversity, primarily fescue and relatively poor wildlife habitat.

Current Land and Water Types:

Land/Water Type	Acres	% of Area
Grassland	1,049	52
Woodland	791	38
Cropland	120	6
Savanna	60	3
Other: Roads, Fishless Ponds, Parking Lots	16	0.7
Open Water	8	0.3
Total	2,044	100

Public Input Summary:

The draft White River Trace Conservation Area Management Plan was available for a public comment period April 1–30, 2015. The Missouri Department of Conservation received comments from five respondents (Appendix A). The White River Trace Conservation Area Planning Team carefully reviewed and considered these ideas as they finalized this document. A

brief summary of public input themes, including how they were incorporated or why they were not, can be found below. Rather than respond to each individual comment, comments are grouped into general themes and are addressed collectively.

Department responses to themes and issues identified through White River Trace Conservation Area public comment period

Supports management to create bobwhite quail habitat. Values that the area is a designated Quail Emphasis Area.

Thank you.

Suggests stricter regulations on harvesting quail on this area to avoid over harvest.

Concern with number of quail currently on area.

Currently White River Trace CA is limited to a six week season and annual harvest is usually less than 75 birds. Quail decline is an issue nationally and several research projects are being implemented to help identify possible solutions.

Impressed with habitat restoration on this area. Suggests replacing food plots with native grasses and forbs.

This is a great comment that we are planning on implementing on some specific fields on the area. The elimination of all food plots is not planned, but the reduction will be implemented where existing food plots are not currently productive.

Suggests a large lake and wetlands on the area to attract ducks, geese and shorebirds.

White River Trace CA was purchased specifically for upland wildlife, and because of its sandy soil, wetland management would not be possible.

Suggests additional campsites and making drinking water available.

The camping area at White River Trace CA currently offers primitive camping without electric or water. No more infrastructure is planned.

Recommends developing 10-12 miles of multi-use (hike/bike/horse) trails on the area.

White River Trace CA currently offers over 10 miles of interior roads often utilized by walk-in hunters. Since these roads are not listed as multi-use, bicycles, vehicles and horses are not allowed.

Appreciates clean restrooms.

Thank you.

References:

- Missouri Department of Conservation. (2009). *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation*. Jefferson City, Missouri: Missouri Department of Conservation.
- Nigh, T. A., & Schroeder, W A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.

Maps:

- Figure 1: Area Map
Figure 2: Aerial Map
Figure 3: Topographic Map
Figure 4: Cover Type Map

Additional Appendices:

- Appendix A: White River Trace Conservation Area Public Comments

Figure 1: Area Map

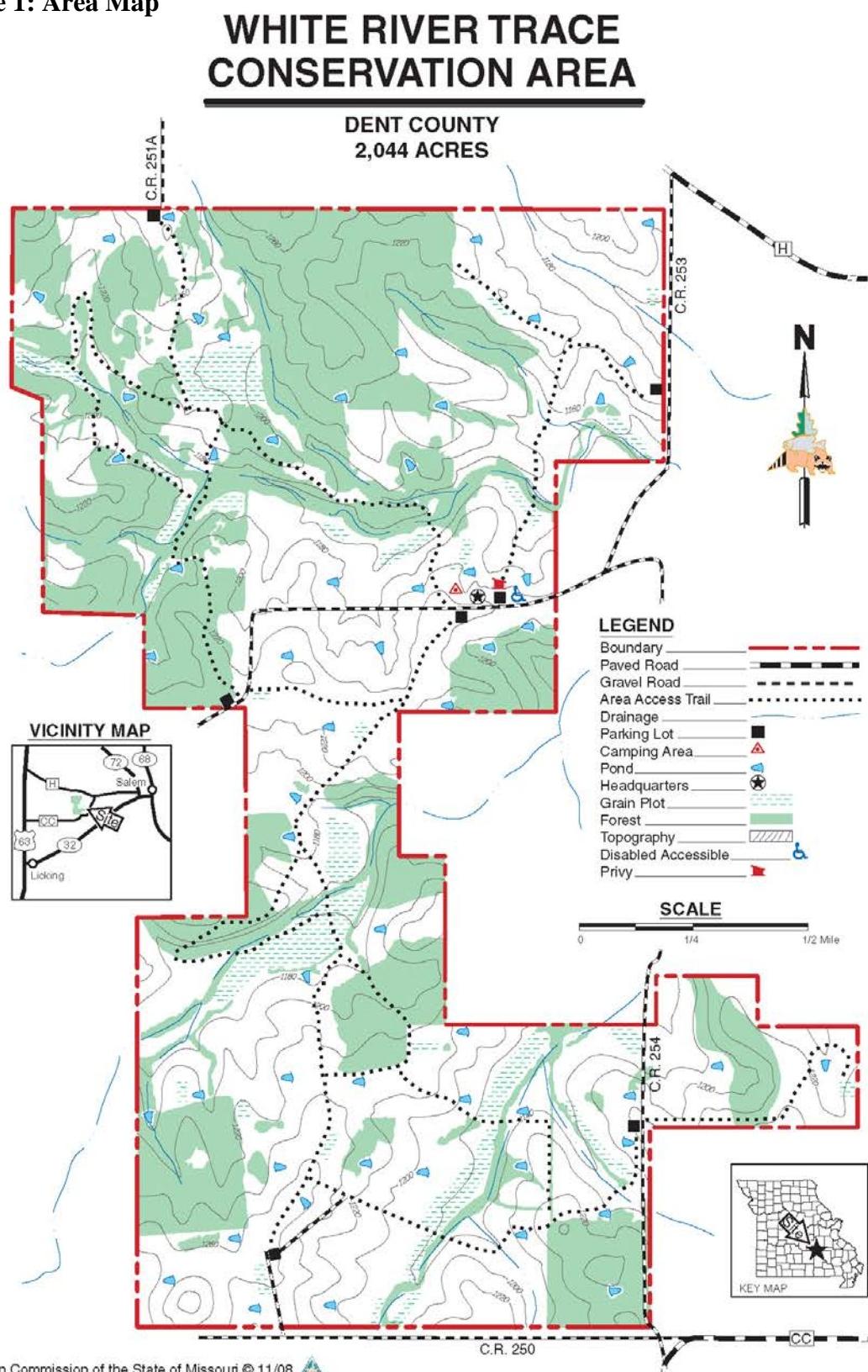


Figure 2: Aerial Map

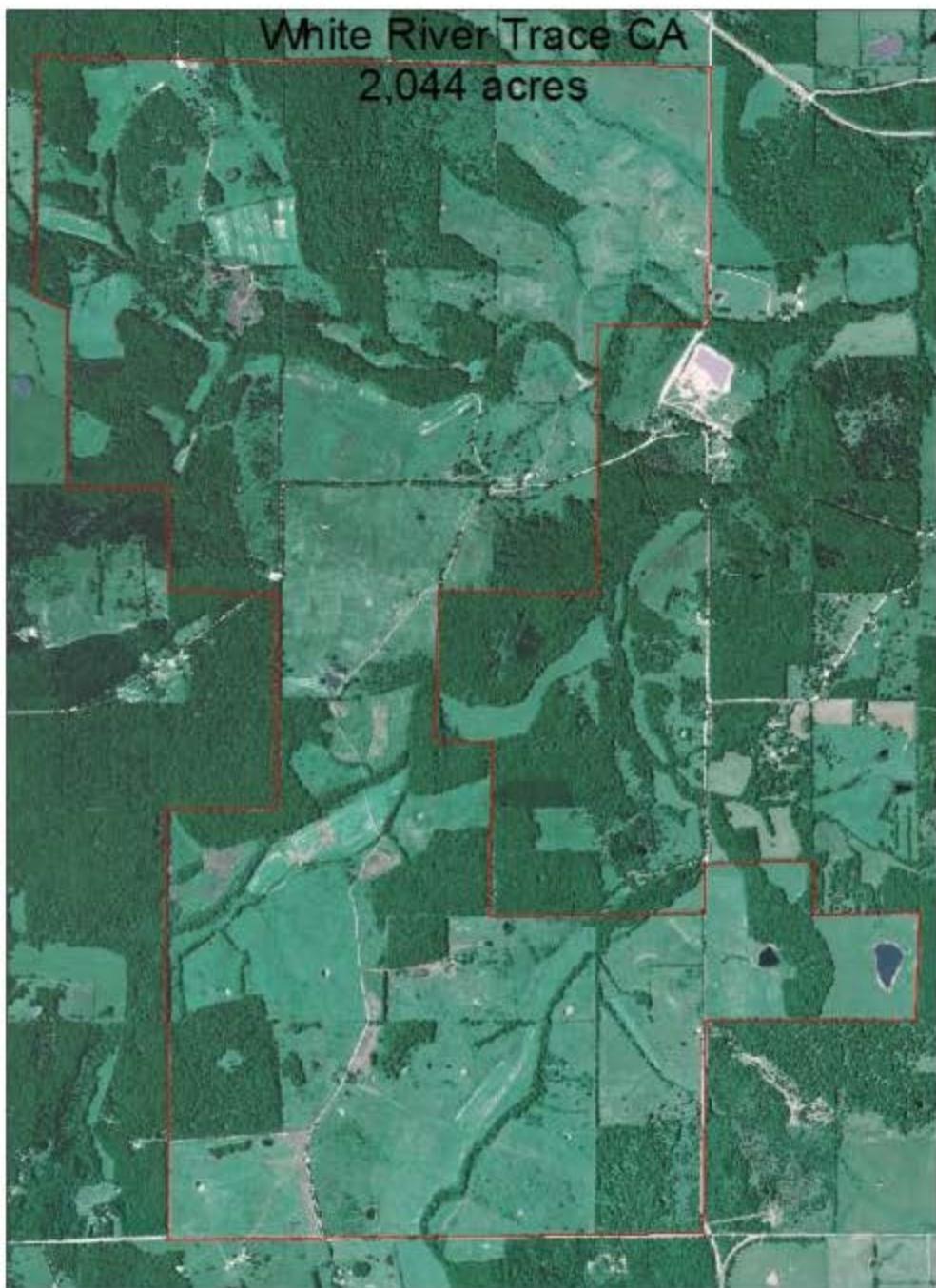


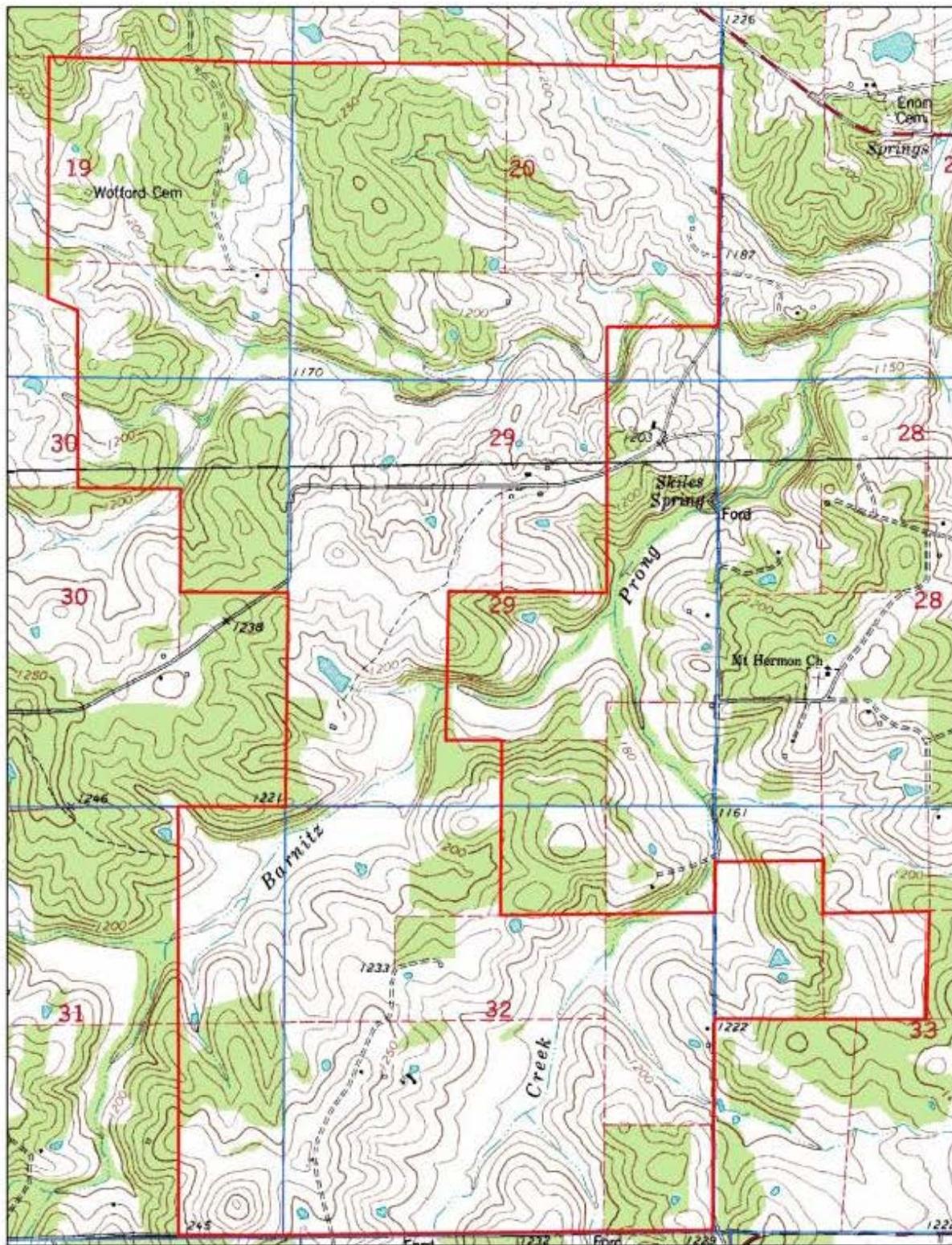
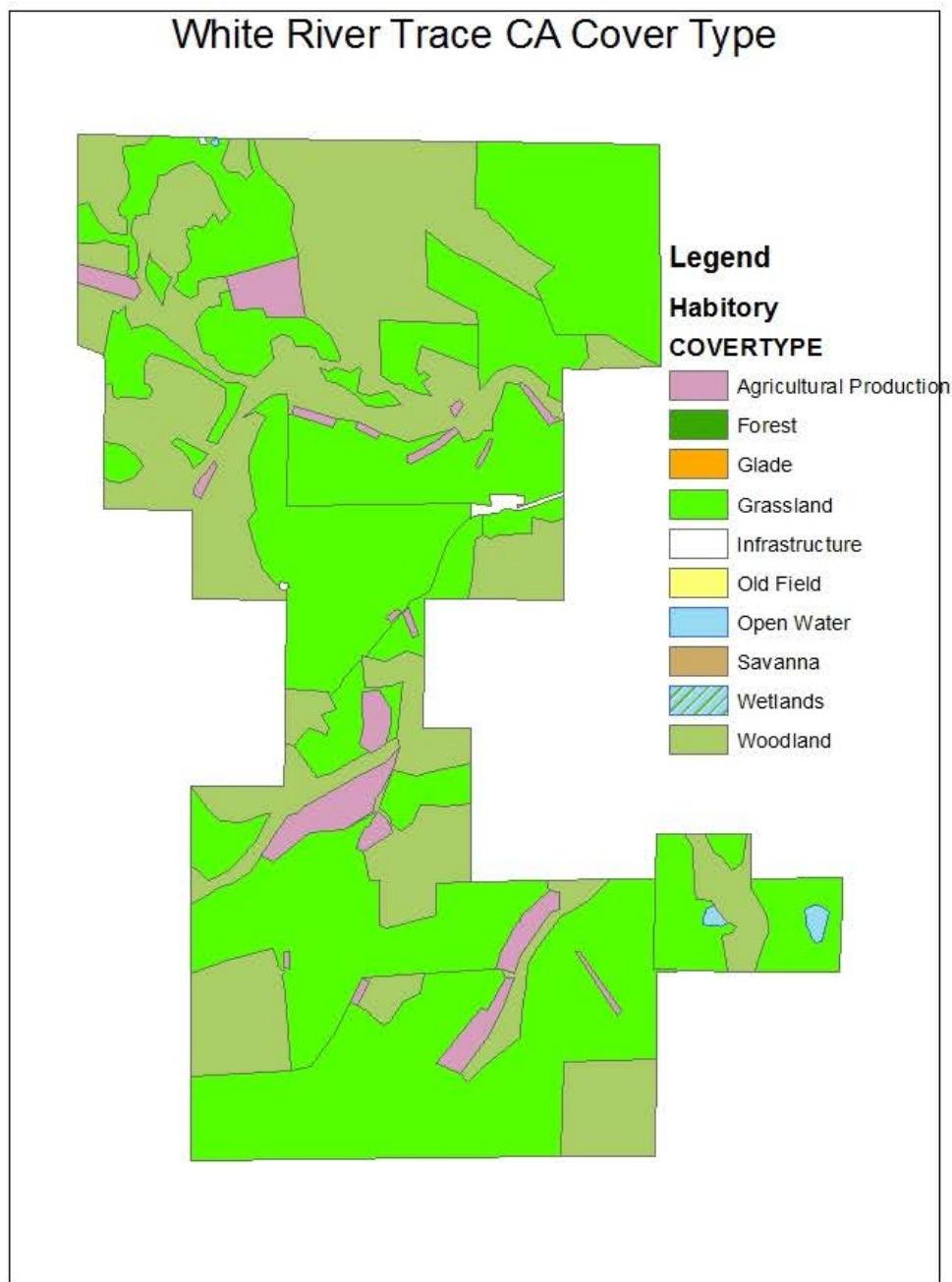
Figure 3: Topographic Map

Figure 4: Cover Type Map



Appendix A: White River Trace Conservation Area Management Plan Public Comments

Received during public comment period (April 1-30, 2015)

Very good plan. Please consider more campsites and make available drinking water outlet.

My wife and I visited White River Trace" CA for the first time over the weekend. She and I both loved it. We are interested/supportive of the work being done to create good habitat for Bobwhite Quail. As a kid many years ago, my father and brothers hunted quail in and around Rolla area. I have and always have a fondness for quail. In addition, we plan to return to the CA to view wildlife such as deer, turkey and bird life. (Noteworthy is we saw two wild turkeys, not inside the CA, but on our way to and from the site, during our weekend trip). We also want to pass along that we appreciate the restrooms maintained in a clean manner. On our Sunday trip, we brought along our dogs to hike along with us. They got some much needed exercise and really enjoyed it too. I look forward to fishing in some of the ponds that are big enough for fishing. I did notice many of the ponds are very low and are not big enough to support fishing, yet I realize they will serve as a water source for wildlife. Speaking of, during our hike near one of those ponds, on what I refer to as the northern (burned area), we notice a bird with some sort of prey in it's claws near one of the ponds. Overall we dearly enjoy all of the CA's. My wife did comment that White River Trace is unique in that it is not all about just forestry. It's open vista's and view lanes offer a person (with binoculars if I remember to bring them along) long lines of site. Another trip I hope to fit into my busy schedule is to mushroom hunt along the creek, again running thru the north 1/2 of the CA. We have noticed Dent county has a wide assortment of CA's. We plan to visit them all as time allows.

I do think there is anyone who has walked the birded the trace more than me. I have walked every acre of the trace over the years and as much as I am impressed with the habitat restoration and on going habitat work I am concerned by two things.

1. Food plots. I am not a big fan, they are for hunters and others who do not understand or appreciate native plants and their value. I would like to see all food plots eliminated and native grasses and forbs back where they belong. Wildlife will benefit greatly as will the soil.
2. I have always been concerned by the lack of a large lake and wetlands. I see and hear all species of ducks and geese fly overhead as well as shore birds. There is a need for this diversity on the trace and it would also open up another area for duck hunting.

Thank you

I appreciate the designation of WRT as a Quail Emphasis Area. More emphasis on quail should be directed throughout the Ozark Region. With the QEA label, WRT will undoubtedly receive additional attention from upland hunters. My concern is increased hunting pressure causing an overharvest of quail, or at the very least, a disproportionate percent of the quail harvest going to a very few local groups of hunters. Please consider regulatory measures to equitably distribute the harvest or reducing the daily limit of quail on WRT.

FYI I have hunted WRT with my dogs and with friends that have dogs every year and have yet

to see the number of birds expected to be on a Quail Emphasis Area.

Thank you

Thank you for the opportunity to comment on the White River Trace CA Management Plan. White River Trace offers something quite rarely found on public lands in the Ozarks—a predominance of open land. This presents a unique outdoor experience opportunity for this region, and the CA is large enough to be conducive to developing a quality trail network. While open vistas are the rule in the Cherokee Prairie and much of North Missouri nearly all of the public land in the Ozarks is forested. There is an extensive network of “area access trails” already designated on the CA; the trails provide interconnection with most of the open land. The access trails could be supplemented with trails (mostly through the woods) to form additional loops. This system would provide a very pleasant multi-use trail system for hikers, bikers, and riders that would combine forest and open land experiences on the same outing. That would be a great combination anywhere, rare in the Ozarks. White River Trace CA is listed as a highest priority area for implementation of multi-use trails in Show-Me Missouri Back Country Horsemen’s 2015 proposal, “Expanding Public Land Multi-use Trails in Missouri.” White River Trace would provide multi-use trails for the greatly underserved ten-county Southwest Central Area.

Trail riders and off-road bikers in Dent County and the surrounding area are, in theory, provided the opportunity to pursue their hobby on public land on the Indian Trail CA northeast of Salem. Indian Trail sees very little use, however, because riders and bikers are confined to public roads. Riding public roads is most unappealing and sometimes dangerous for bikers, riders, and automobiles. In addition to the diversity of the combination of open land and forest, trails on White River Trace would offer a quality multi-use riding and biking experience which is currently lacking in the Dent County area.

SMMBCH recommends the development of 10-12 miles of multi-use trails on the White River Trace CA by adding planned trails to the existing area access trails. SMMBCH offers our services (availability of volunteers permitting) to help decide on the best location and then clear and mark the trails.

Thank you again for the opportunity to comment.